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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,107	06/08/2006	Nobuhiko Tsuda	Q94915	1637
23373	7590	04/14/2009	EXAMINER	
SUGHTRUE MION, PLLC			BUIH, NICOLE M	
2100 PENNSYLVANIA AVENUE, N.W.			ART UNIT	PAPER NUMBER
SUITE 800				1796
WASHINGTON, DC 20037				
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		04/14/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/582,107	<b>Applicant(s)</b> TSUDA ET AL.
	<b>Examiner</b> NICOLE M. BUIE	<b>Art Unit</b> 1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 January 2009.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-7, 9-10, and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-7 and 13-15 is/are rejected.
- 7) Claim(s) 9,10 and 12 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/06)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

*Response to Amendment*

The amendment filed on 01/05/2009 has been entered. Claims 1-7, 9-10, and 12-15 remain pending in the application. The previous objections to claims 1-15 have been withdrawn in light of Applicants' amendment to claims 1 and 14-15.

*Claim Rejections - 35 USC § 103*

**Claims 1-7, and 13-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Doughty, Jr. et al. (US 3,855,191) in view of Hirono et al. (JP 06-065337, see machine translation for citation) as evidenced by Hoshikawa et al. (US 6,498,207).

**Regarding claims 1-2 and 4-7,** Doughty, Jr. et al. discloses a fluoropolymer aqueous dispersion which comprises tetrafluoroethylene copolymer particles dispersed in an aqueous medium (Abstract), wherein fluoropolymer solid matter content is 23% by mass as disclosed in Example 1 which meets the claimed range. Doughty, Jr. et al. discloses the amount of fluorine-containing anionic surfactant added to the dispersion is from 10-40 ppm, therefore the supernatant should have a similar amount (C4/L22-40).

However, Doughty, Jr. et al. does not disclose a nonionic surfactant. Hirono et al teaches the nonionic surfactant amounts to 1 to 5% by mass relative to the aqueous dispersion [0039]. Doughty, Jr. et al. and Hirono et al. are analogous art concerned with the same field of endeavor, namely aqueous fluoropolymer compositions. It would have been obvious to one of ordinary skill in the art at the time of invention to use a nonionic surfactant of Hirono et al. in an aqueous dispersion of Doughty, Jr. et al., and the motivation to do so would have been as Hirono

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et al. suggests improving the stability of the aqueous dispersion [0038]. As evidenced by Hoshikawa et al, aqueous dispersion resulting from emulsion polymerization with only an anionic dispersant is very unstable by itself (C1/L12-34).

The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. wherein a supernatant for assaying as obtained by subjecting said fluoropolymer aqueous dispersion to 30 minutes of centrifugation at 25°C and at a gravitational acceleration of 1677G, when subjected to high-performance liquid chromatography [HPLC] under the conditions of a flow rate of 1.0 ml/minute and a column temperature of 40°C using an acetonitrile/0.05 M aqueous solution of phosphoric acid (60/40% by volume) mixture as a developing solution, followed by detection at an absorption wavelength at which said nonionic surfactant would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

**Regarding claim 3,** Doughty, Jr. et al. discloses the fluoropolymer aqueous dispersion wherein an electrolyte is incorporated ("ammonium carbonate", C8/L57-62).

However, Doughty, Jr. et al. does not disclose the specific electrolyte concentration of the said claim. As the stability of the aqueous dispersion is variable that can be modified by adjusting said amount of electrolyte as taught by Hirono et al. ([0042],[0048]), the precise

amount of electrolyte would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, amount of electrolyte, and the motivation to do so would have been to obtain desired stability of the aqueous dispersion (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

**Regarding claim 7**, Doughty, Jr. et al. discloses the fluoropolymer aqueous dispersion wherein the fluoropolymer is a tetrafluoroethylene polymer, which is a perfluoropolymer (Abstract, C1/L6-8).

**Regarding claim 13**, Doughty, Jr. et al. discloses a fluoropolymer powder which is obtained by drying a wet powder obtained from a fluoropolymer aqueous dispersion (C5/L26-31).

**Regarding claim 14**, Doughty, Jr. et al. discloses a fluoropolymer molding which is obtained by molding the fluoropolymer aqueous dispersion (C5/L26-42).

**Regarding claim 15**, Doughty, Jr. et al. discloses a fluoropolymer molding which is obtained by molding the fluoropolymer powder (C5/L26-42).

***Response to Arguments***

Applicant's arguments filed 01/05/2009 with respect to claims 9-10 and 12 have been fully considered and are substantially persuasive. The rejection of claims 9-10 and 12 has been withdrawn. The following comments apply:

- A) Since JP '337 does not teach or suggest a fluoropolymer solid matter content of 20 to 80% by mass relative to said fluoropolymer aqueous dispersion, therefore the previous rejection over JP '337 has been withdrawn.
- B) Doughty, Jr et al. does teach an aqueous dispersion with an amount of fluoropolymer solid matter content which meets the claimed range. Therefore, the rejection of Doughty, Jr et al. in view of Hirono has been maintained.

***Allowable Subject Matter***

**Claims 9-10 and 12** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the closest prior art of record, Doughty, Jr. et al. in view of Hirono does not teach or suggest a method wherein a concentration operation is done twice. Therefore, claims 9-10 and 12 are deemed nonobvious over the prior art of record.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE M. BUIE whose telephone number is (571)270-3879. The examiner can normally be reached on Monday-Thursday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. M. B./  
Examiner, Art Unit 1796  
3/26/2009

/Marc S. Zimmer/  
Primary Examiner, Art Unit 1796